Template™ Software: the new language of computer graphics.

MEGATEK / TEMPLATE

Template software: the tool that puts you in command of the world of computer graphics.

The potential of computer graphics has excited both business and industry for years. Now Template software provides the power to reach that potential. Quickly. And easily.

Template is the sophisticated new software tool that helps you master virtually any computer graphics problem. With its computer/device independent, ANSI-standard FORTRAN vocabulary, Template can bring your ideas to life in both business and engineering applications.

Even more than a draftsman's templates, Template puts all the basics at your fingertips.

The freedom of full computer and device independence.

Template software is computer-independent software. So your application goes on-line fast, regardless of whose mainframe you're using. And you have the freedom to move to a new computer without writing new software.

Template is designed to support both batch and interactive applications. On popular 32-bit and larger machines from IBM, Control Data, Univac, DEC, Prime, Perkin-Elmer, and others.

And Template supports a full range of display and plotting devices. Any device that draws a vector. Raster displays. Refresh vector displays. Storage tube displays. Pen plotters. Computer output microfilm recorders. So one software package provides the solution for all your applications.

It all adds up to unmatched flexibility. A complex graphic image can be generated interactively in real time on a refresh display. Then it can be stored in a computer/device-independent pseudo-device file. Later, the file can be used to generate the same image on a pen plotter running in batch mode, or on microfilm. Or the file can be transferred to another computer for use with other display and plotting devices. Think of the savings in operator and CPU time.

Creativity made simple.

Template provides both vocabulary and grammar to simplify construction of powerful, high-quality graphics for your application. It equips the graphics developer with a natural form of communication to his system. And the most advanced support for interactive graphics programming available. This includes support for such inter-

active peripheral devices as keyboards, data tablets, buttons, control dials, light pens and other pick devices.

With a wide variety of high level routines and mnemonic mode settings, Template utilizes short calling sequences that are virtually self-documenting. In summary, Template is the shortest path to the most efficient and cost-effective programming techniques for computer graphics.

Your computer's paint-by-numbers kit.

Output in its most dramatic form is one of Template's key attributes. For example, shading to emphasize a portion of a display broadens your powers of expression. And the exciting effects of color punctuate visual statements constructed with Template.

A broad choice of output formats makes it possible to represent data in the most clear and concise form. Regardless of the form your graphics take, Template provides flexibility to execute and output your design. In color, or black and white. In single or multiple copies, for reports or presentations. As reproduction-quality artwork, ready for the printer. Even as color slides.

How Template works for you.

Here's the ultimate tool for Computer Aided Design. An operator can work in any coordinate system the application requires. Even multiple coordinate systems can be used—Template will handle the required transformations with ease. A 2-D or 3-D viewing environment can be defined, allowing objects to be drawn from any point of view. And once an object is defined, a view can be changed with a single, easy-to-remember call.

Template provides the most advanced data manipulation features available. It provides full device and computer independent archiving of graphical output. Display list segmentation and subroutining allows flexible programming. And makes efficient use of both dynamic and static display and plotting devices.

It was never easier to define an object. Display it. Add multiple views. View only a portion of it. Modify the object's definition. Without starting over. The *interactive* approach to computer graphics.

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Watch your ideas take shape with Template.

Geometric models are called up instantly.

Template supports a wealth of geometric figures. Including circles, rectangles and polygons. Lines, arcs, and conic sections. Even a variety of curve-fitting functions.
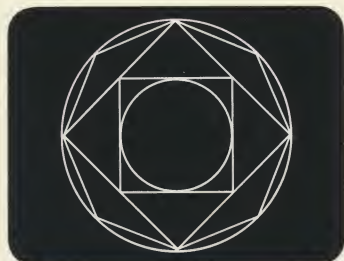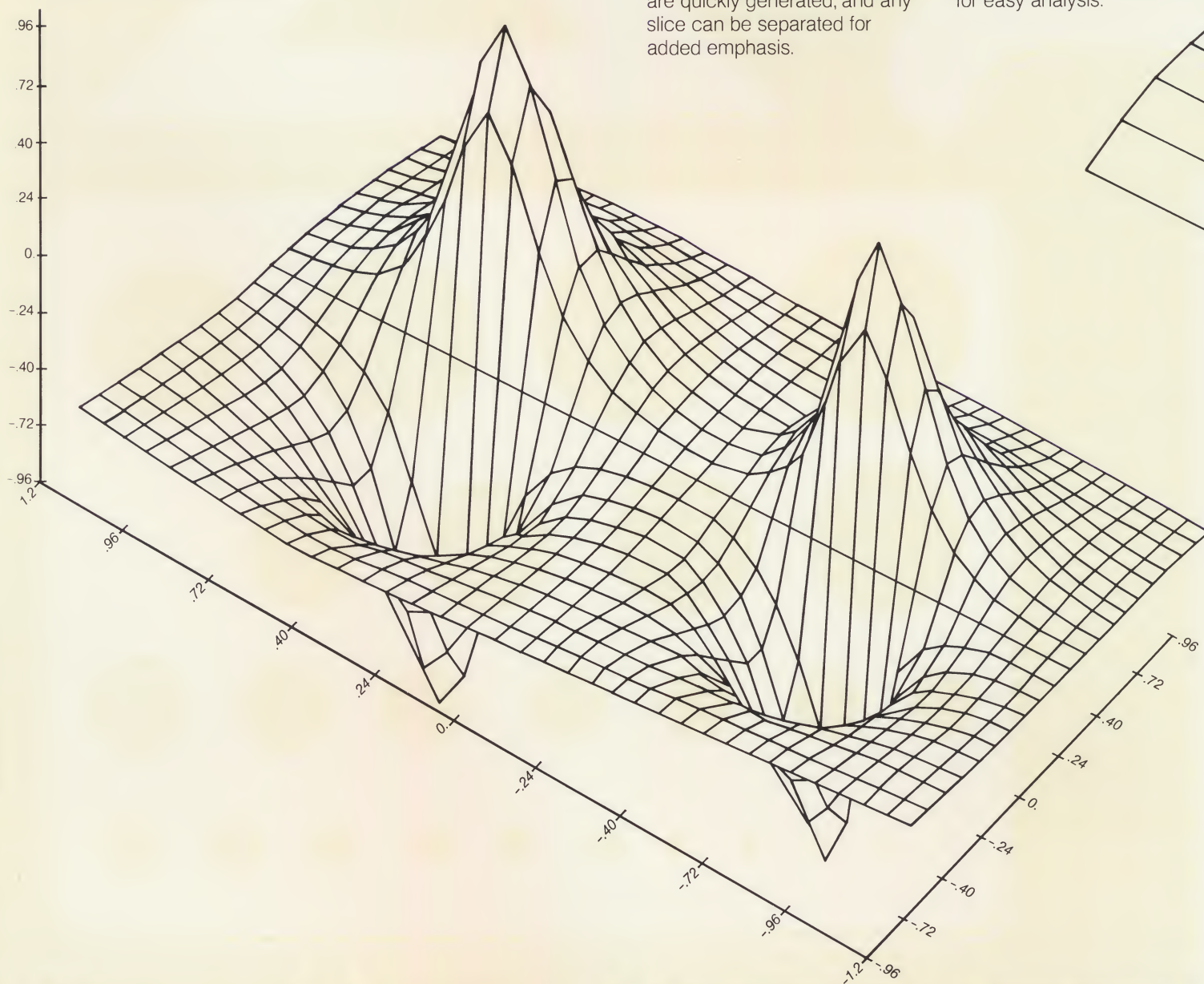
And Template can define graphics structures that are computer and device independent. Any structure is easily archived, then retrieved for future use or modification.
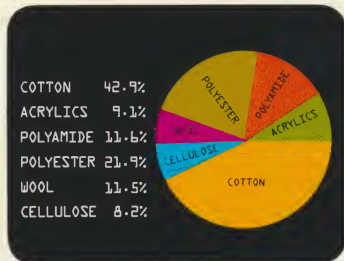
Business data representation made easy.

You'll attain new levels of clarity and impact in bar charts, graphs, histograms and time series plots. Tedious calculation and penwork are eliminated. Hard to construct pie charts are quickly generated, and any slice can be separated for added emphasis.

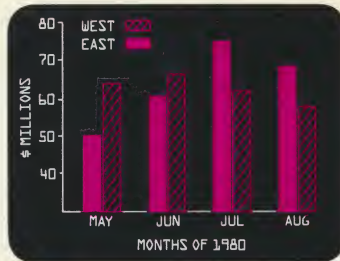## Precise definition of scientific data.

With Template, even complex graphics problems in contouring and surface representation can be easily constructed on all types of output devices. Or mix contours with other data formats for easy analysis.
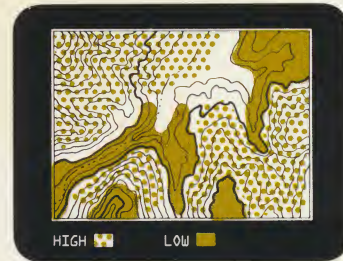
Generate many geometrical figures including polygons, circles, arcs, and conic sections.

For greater emphasis, one or more slices may be exploded from the pie.

You supply the data, and Template will supply the axes, labeling and data display using pie, bar, graph or histogram.
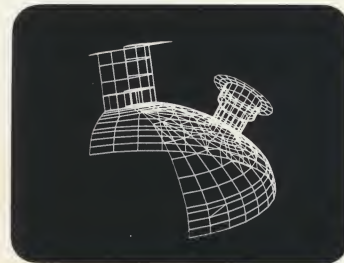
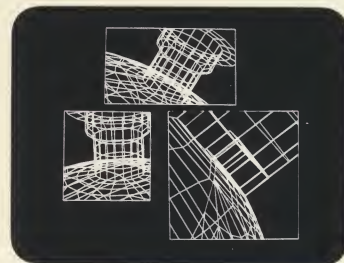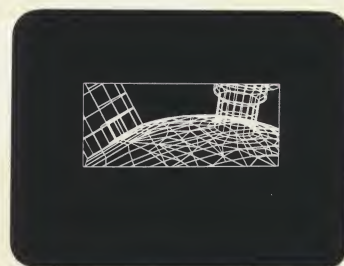Even contours and mapping can be accomplished with ease.
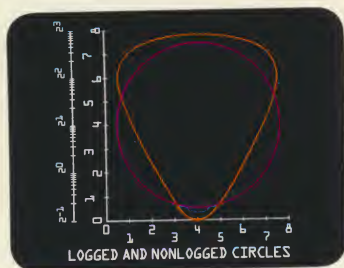
The perfect tool for interactive graphics.

The structured concepts used in Template mean that simulation, modeling and computer-aided design come easily. Images of objects ranging from basic to complex are simple to construct in 2-D or 3-D, then view from any perspective. Rotate the image, selectively erase or add to it, concatenate several images — Template provides all the flexibility you want in graphics software.

Translation, Rotation and Scaling are integral to Template, with multiple views and full dynamic manipulation of images supported.
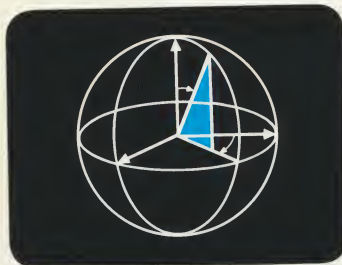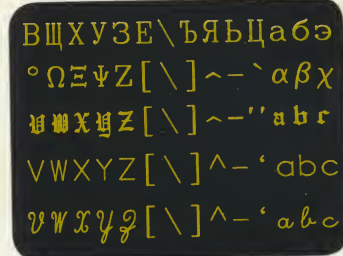
Wide choice of coordinate systems.

A. Any logarithmic base is supported and may be individually selected for each coordinate component.

B. The user can select any coordinate system including cartesian, polar, spherical or cylindrical.

C. Over twenty character fonts are supported by the software character generator as well as device-dependent hardware-generated characters.

LOGGED AND NONLOGGED CIRCLES

A.

B.

C.

Template enables you to define the coordinate system that best relates to your application. Rectangular, polar, spherical and cylindrical coordinate types are mapped in projection. And any logarithmic scaling factor can be selected for each coordinate component.

Text the way you want it.

Text can be generated using either hardware or software character generation. More than twenty different fonts are available, along with such typographic capabilities as automatic justification (left, right, and center), underlining, subscripts, superscripts and a choice of proportional or fixed letterspacing. Mix texts with other graphical output to provide quality artwork for any documentation need.

Specifying color and other graphic variables.

Color and color table values are easy to specify. Emphasis may be added with dramatic additions of dotted and dashed lines, and various types of shading. These and other display attributes can be controlled interactively to allow the most flexible and dynamic displays possible.

Put Template software to work for you. Now.

By offering Template software, Megatek is striving to help users grow easily into the world of computer graphics and simultaneously protect a significant software investment. It is field-proven and designed to last.

Industry standards are vital to this longevity. As such, Template was designed following guidelines contained in ACM SIG-GRAPH's CORE, a proposed standard, and is consistent with current ANSI standardization efforts.
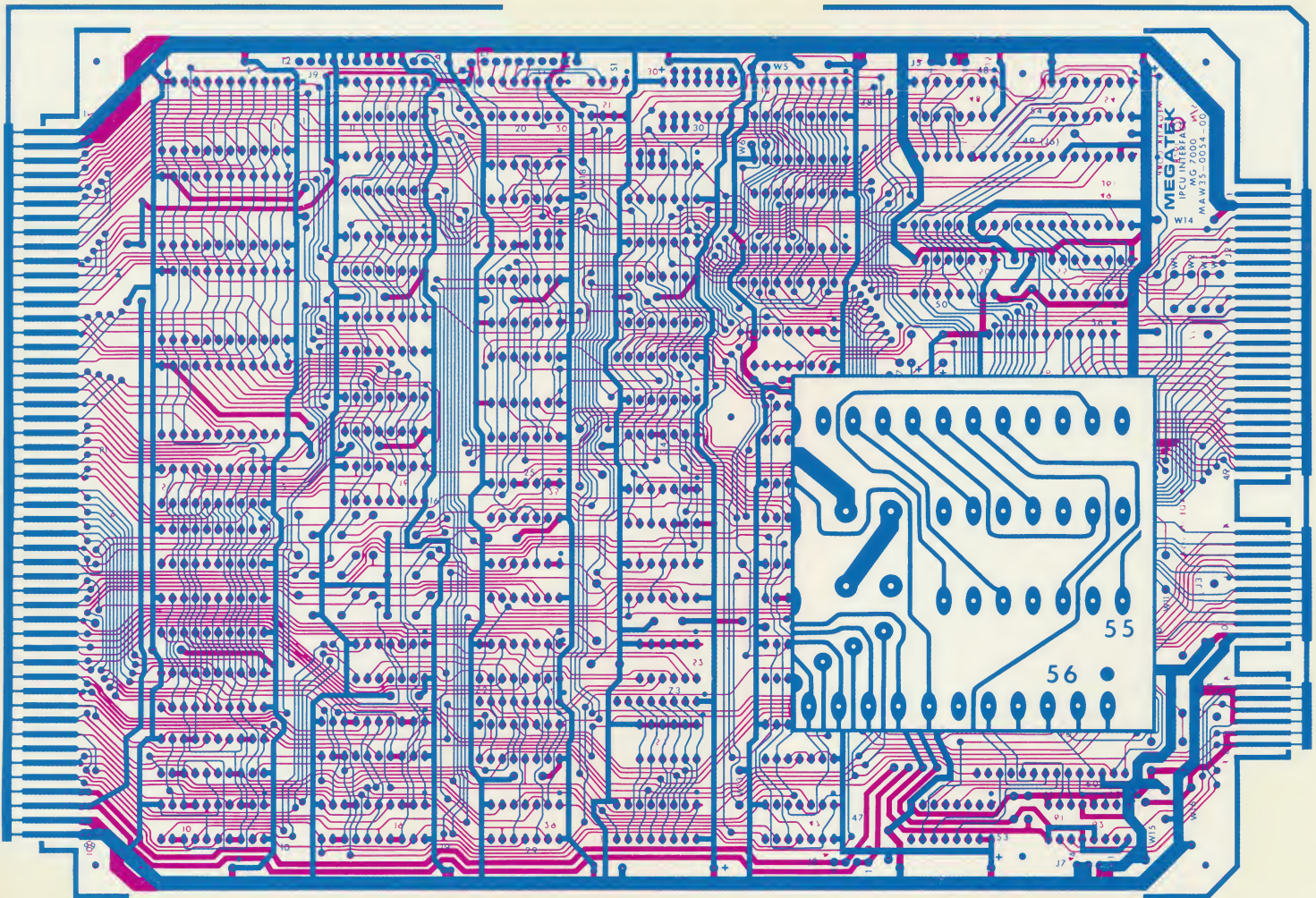
Template software includes everything you need to get off to a successful start. Documentation includes a beginner's manual that covers the basics, a user's manual filled with programming examples, and a complete programmer's reference manual.
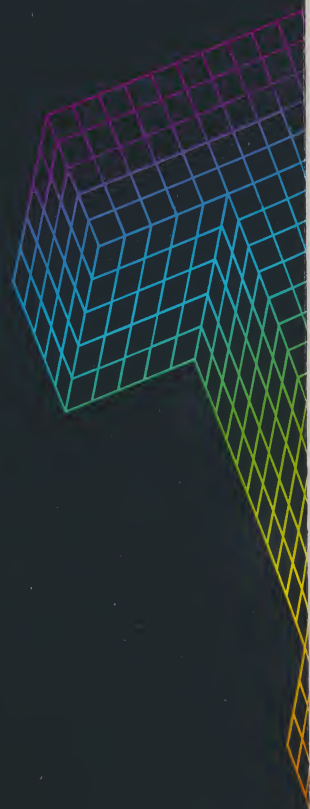
Megatek also provides complete training and installation services with on-site instruction provided by experienced Template users. There's even a telephone "hotline" service for prompt consultation. We make

sure Template works in your environment as well as ours.

It's the kind of support customers have learned to expect from Megatek. We have a corporate commitment to computer graphics, and the resources to live up to that commitment, today and tomorrow. And we have the technical expertise to provide both service and future upgrades for your Template software investment.

When it comes to computer graphics, we speak your language. Find out for yourself. Write or call for more details on Template today.

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